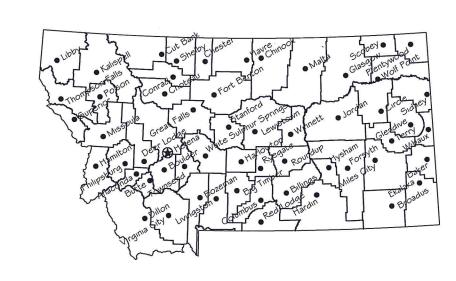
PROPOSED SITE IMPROVEMENTS AT THE

# **CAUSEWAY** FISHING ACCESS SITE

NEAR HELENA, MT

FWP #7173612



**Location Map** 

North

Project Location

**Vicinity Map** 

## MONTANA FISH, WILDLIFE AND PARKS

MAILING ADDRESS:

PHYSICAL ADDRESS:

1522 9th AVENUE

HELENA, MT 59620-0701

HELENA, MT 5960 I

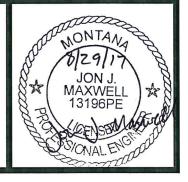
TEL 406.841.4000

fwp.mt.gov/Doing Business/Design Construction

DESIGN AND CONSTRUCTION

### **DRAWING INDEX**

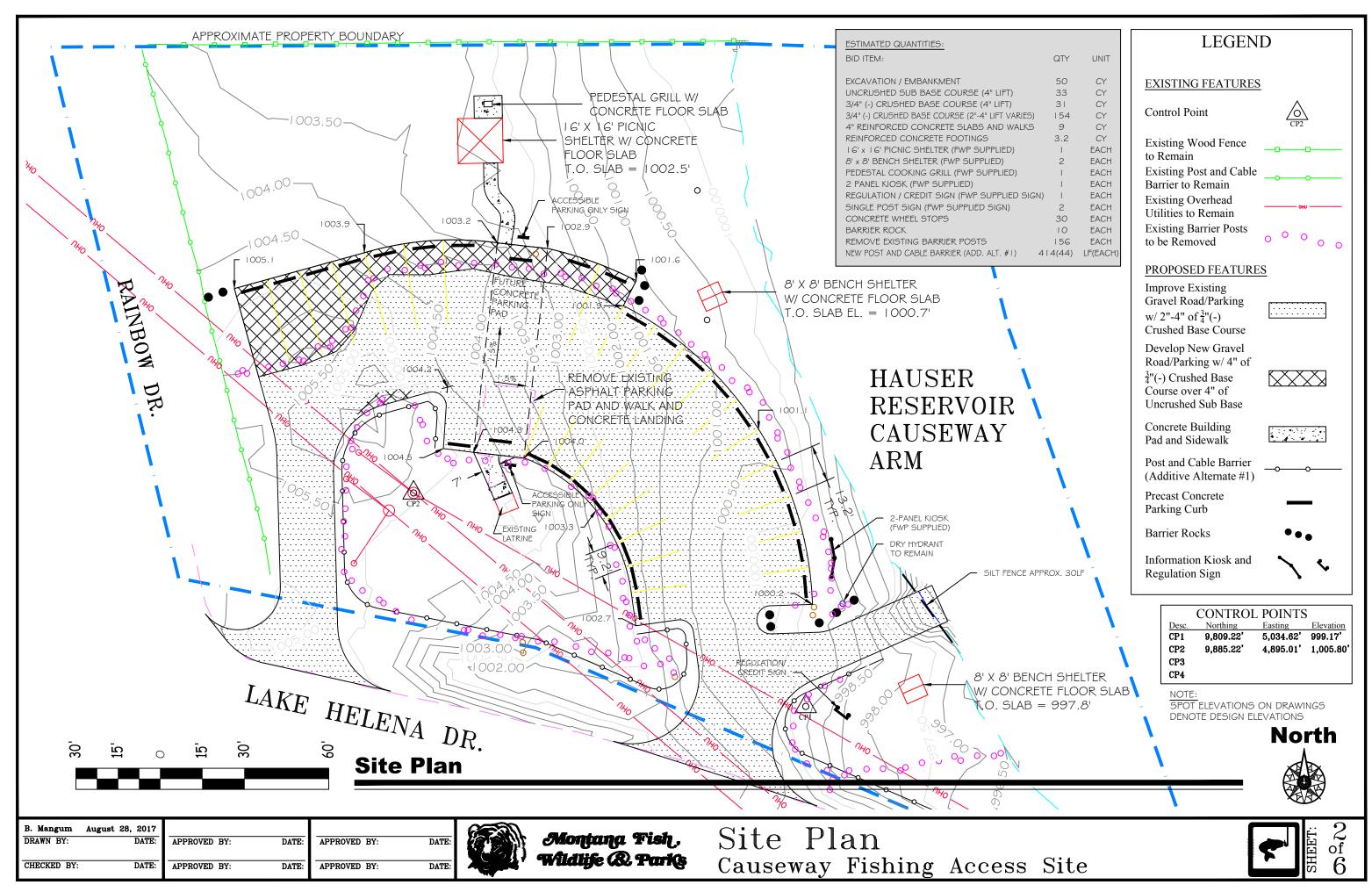
- COVER SHEET
- SITE PLAN
- SITE DETAILS
- SITE DETAILS STRUCTURE FLOOR PLANS
- STRUCTURE ELEVATIONS

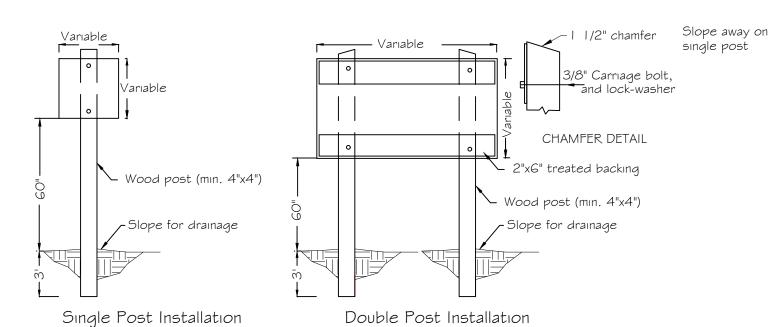


| B. Mangum August 28, 2017 DRAWN BY: DATE: | APPROVED BY: | DATE: | APPROVED BY: | DATE: |
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| CHECKED BY: DATE:                         | APPROVED BY: | DATE: | APPROVED BY: | DATE: |



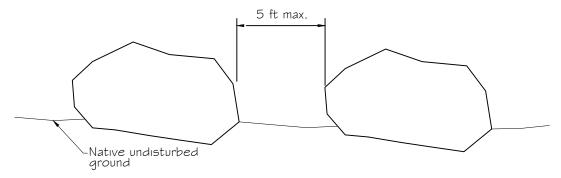
Montana Fish, Wildlife & Parks Cover Sheet Causeway Fishing Access Site





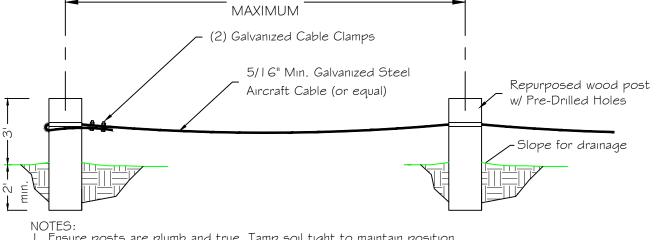
- 1. Use pressure treated timbers for all sign posts. Need break-away holes (or device) for larger posts.
- 2. Coat all posts with preservative for all drilled holes and cut surfaces.
- 3. Use cadmium plated or galvanized steel for all bolts, nuts \$ washers.
- 4. Place bolts to not interfere with sign lettering. Paint bolt heads to match sign.
- 5. Center signle post panels to post, overhang panels 3" beyond posts for double post installations. Extend all posts 3" above sign panels.
- 6. See break-away detail for posts larger than 4 inches in diameter.

### Sign Post Mounting Detail



- I. Barrier rocks shall be placed on undisturbed grade.
- 2. Backfill each boulder with topsoil material to 1/3 height as available.
- 3. Space barrier rocks at a maximum distance of 5 ft (edge to edge).
- 3. Place barrier rocks 5-6 ft from edge of road (edge to gravel).

### Barrier Rock Placement Detail

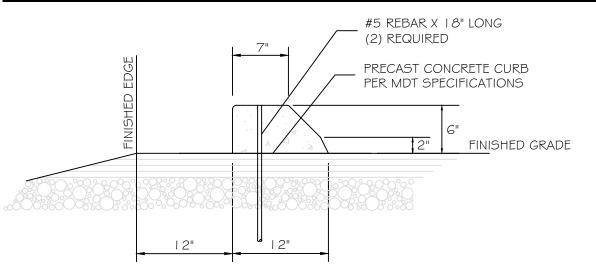


1. Ensure posts are plumb and true. Tamp soil tight to maintain position.

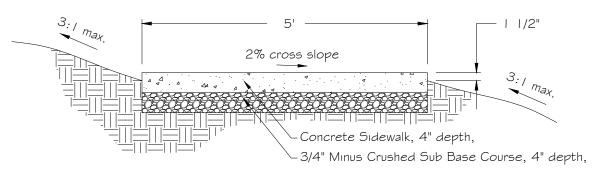
10'-0" O.C.

- 2. Pull cable tight enough to minimize deflection without pulling posts from plumb position.
- 3. Use cadmium plated or galvanized steel for all cable clamps, bolts, nuts \$ washers.

### Barrier Post and Cable Detail



### Precast Concrete Wheelstop Section



Typical Concrete Walk Section

| B. Mangum   | August 28, 2017 |
|-------------|-----------------|
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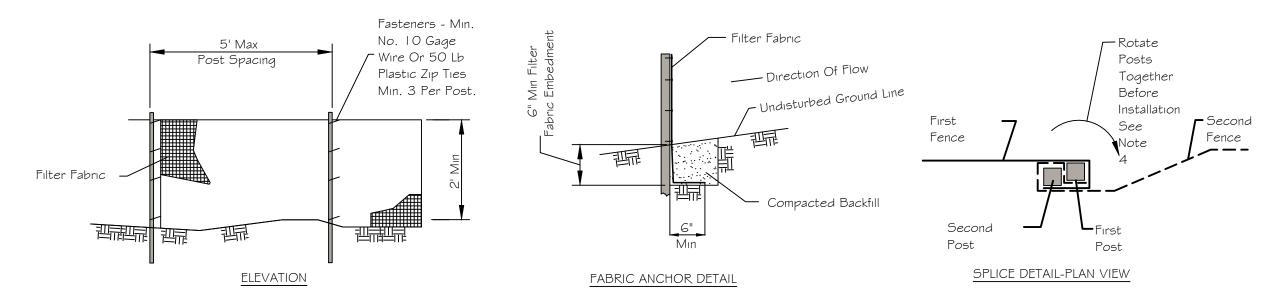


Montana Fish. Wildlife & Parks Site Details Causeway Fishing Access Site



### NOTES:

- I. Temporary silt fence shall be installed prior to any grading work in the boat ramp area. Fence shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
- 2. Filter fabric shall meet the requirements of MPWS specification 02110 Geotextiles.
- 3. Fence posts shall be either wood post with a minimum cross-sectional area of 1.5" X 1.5" or a standard steel T post.
- 4. When splices are necessary make splice at post according to splice detail. Place the end post of the second fence inside the end post of the first fence. Rotate both posts together at least 180 degrees to create a tight seal with the fabric material. Cut the fabric near the bottom of the posts to accommodate the 6 inch flap. Then drive both posts and bury the flap. Compact backfill well.



### Temporary Silt Fence at Gravel Boat Ramp

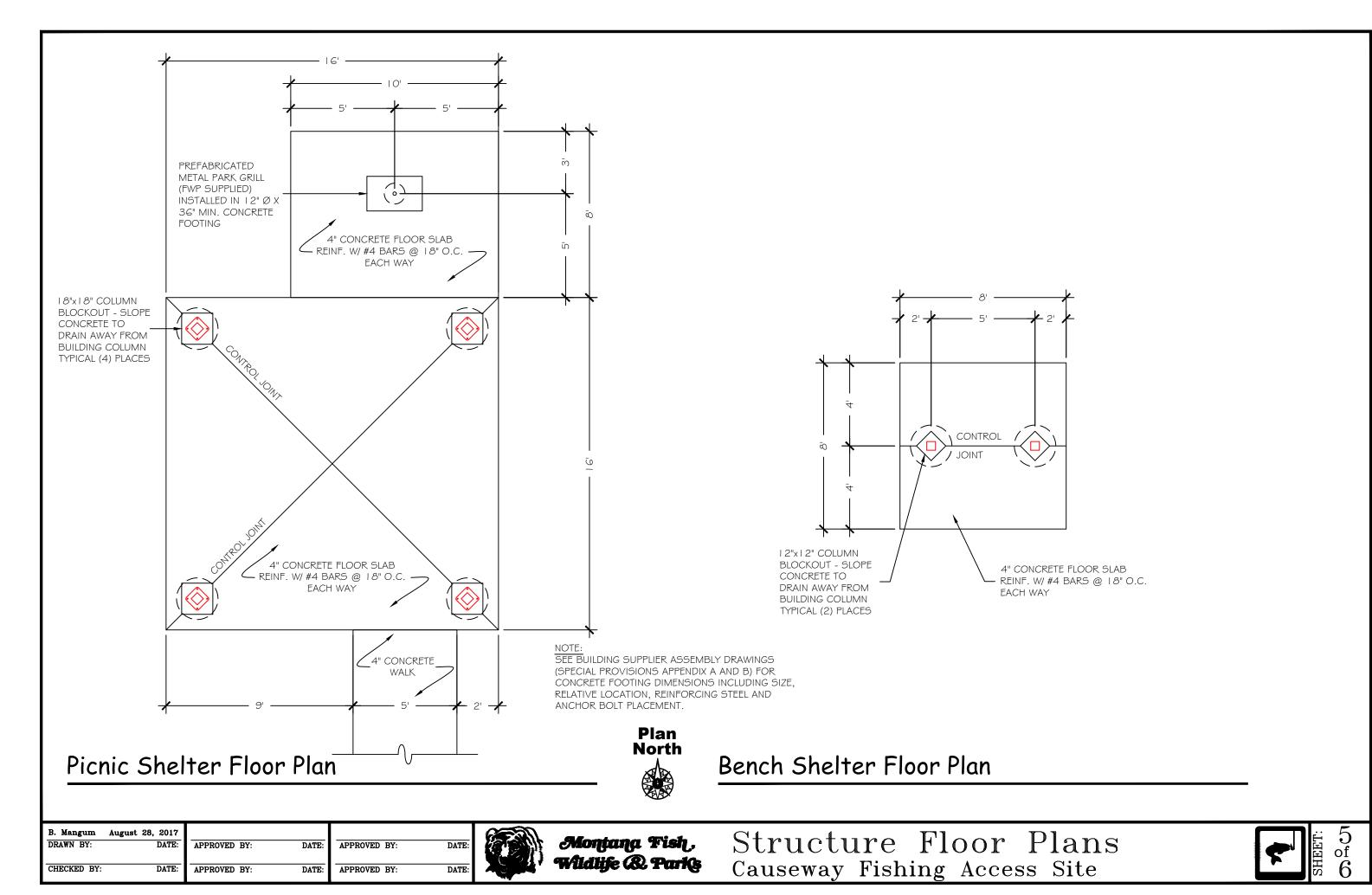
| B. Mangum   | August 28, 2017 |
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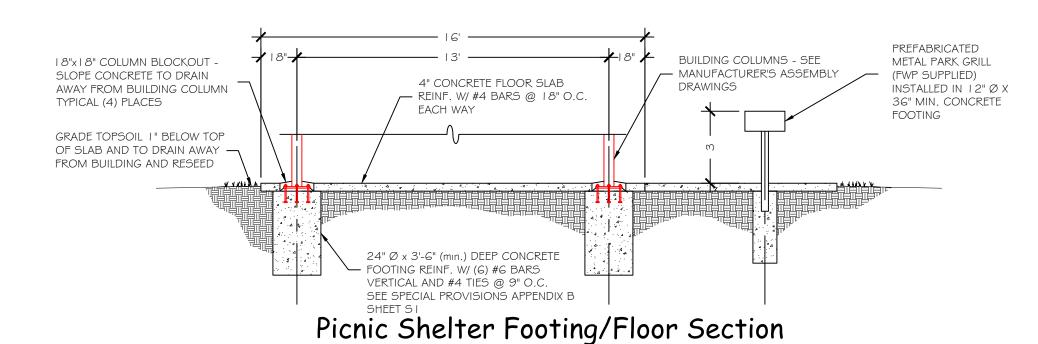
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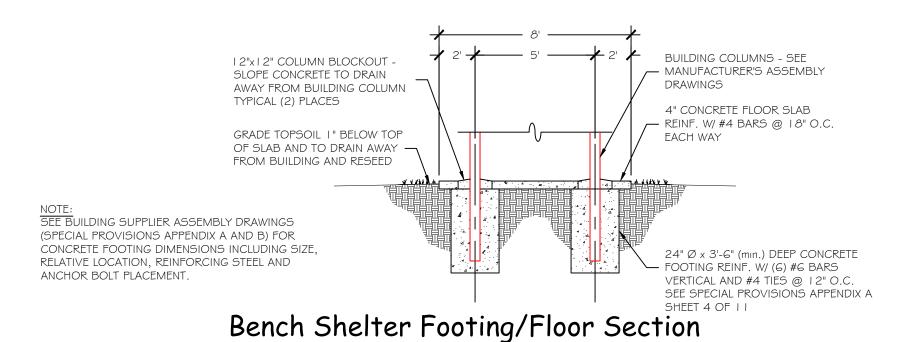


Site Details Causeway Fishing Access Site









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Montana Fish .
Wildlife & Parks

Structure Elevations Causeway Fishing Access Site

